

# Myth: Vaccines Contain Harmful Substances. We Need to "Green" our Vaccines.

## I have heard that vaccines contain additives that might be dangerous. Is this true?

Not at all. There are a number of additives that might be toxic is huge amounts, but those amounts are not present in vaccines. In fact vaccines have much smaller amounts of these substances than we are typically exposed to in every day life.

#### What additives can be found in vaccines?

The additives that get the most attention are:

- 1) Aluminum salts these are used to help your body create a better immune response so the vaccines work better. Aluminum has been studied in vaccines for 75 years and is safe. Aluminum is present in our food and water, and it can be found in products such as antacids and antipersperants. The amount of aluminum in vaccines is about the same as that found in 33 ounces of infant formula.
- 2) Formaldehyde this is used to detoxify diphtheria and tetanus toxins so that the vaccines containing them are safe. Only a tiny amount is used. We are exposed to formaldehyde in products like carpeting, mascara, and paper towels. Formaldehyde is a normal by-product of protein and DNA synthesis in our bodies, and the amount of formaldehyde circulating normally in our blood stream is much higher than that found in vaccines.
- 3) Antibiotics some vaccines contain antiobiotics such as neomycin or streptomycin to prevent contamination during the manufacturing process. The amount is tiny. The antibiotics used in vaccines are not the type that typically cause allergic reactions in people, but they should not be given to those with a servere allergy to that particular antibiotic
- 4) Gelatin some vaccines contain gelatin to protect them from excessive heat or cold. It may cause allergic reaction in those who are allergic to gelatin, so those vaccines should not be given to those with a servere allergy to gelatin. Some religious groups do not eat pig products (gelatin is made from pig hooves), but all major religious groups have approved the use of vaccines containing gelatin because the vaccine is injected, not swallowed, and because the amount is much tinier than is found in nature.
- 5) Polyethylene glycol this is a chemical often used in personal care products like skin cream and toothpaste. It is used in some vaccine to purify them. It is often confused with "anti-freeze" which is actually made of ethylene glycol, as substance that is not in any vaccine and would not be safe for children.
- 6) Thimerosal most vaccines do not contain this chemical anymore. In the few that do contain this chemical, it is a small amount and has never been shown in any large scale study to ever cause a problem in vaccinated children. For more detail, read the myth document about thimerosal and autism.

Bottom Line: The additives in vaccines are there for a reason. They make the vaccines safer and more effective. The additives are there in tiny amounts and are safe. We are exposed to many of these chemicals in our everyday lives, and most of us suffer no ill effects from them.

### If I am still concerned, should wait to have my child vaccinated?

No. The CDC recommends vaccines to children or adults in specific age groups according to how susceptible they are to a certain disease at their age. Spacing out or delaying vaccines will not reduce your child's exposure to vaccine additives, it only increases the time that your child is at risk for those vaccine-preventable illnesses. A choice not to vaccinate is a risky choice.

## Where can I get more information?

http://www.cdc.gov/vaccinesafety/index.html

http://www.chop.edu/service/vaccine-education-center

http://www.vaccineinformation.org/

http://www.healthychildren.org/english/health-issues/vaccine-preventable-diseases/Pages/default.aspx